

willand 42-045-00070

Monroe Energy, LLC 4101 Post Road Trainer, PA 19061 (610) 364-8000

January 11, 2017

Via FedEx

James Rebarchak Regional Air Program Manager PA Department of Environmental Protection 2 East Main Street Norristown, PA 19401

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JAN 3 1 2017

Air Protection Division

Subject:

Benzene Waste Operations NESHAPS

Quarterly Report: October 31, 2016 - December 31, 2016

EPA ID No. PAR 000015768

Dear Mr. Rebarchak:

Monroe Energy, LLC, Trainer Refinery, submits this letter to fulfill the quarterly reporting requirements pursuant to 40 CFR Part 61, Subpart FF, §61.357(d).

During this reporting period, the Crude Oil Desalter Brine Treatment Unit (BTU) was monitored as required by 40 CFR Monthly samples were collected in October, November, and December. Measured benzene concentration in the BTU effluent remained less than 10 ppmw during the report period.

In addition to the above, all other required monitoring and inspections have been completed in accordance with the requirements of the aforementioned section.

Based on the information and belief formed after reasonable inquiry, I certify that the statements and information contained in this report are true, accurate, and complete.

If you have any questions about this report, please call Stephani Ski Szymanski, Environmental Engineer, at (610) 364-8073.

K. Warmann dEO and President

Cc:

Office of Air Enforcement & Compliance Assistance

U.S. EPA, Region 3 Mail Code 3AP20 1650 Arch Street

Philadelphia, PA 19103-2029

Via FedEx



9. Willard 42-045-00070

Monroe Energy, LLC

Trainer Refinery 4101 Post Road Trainer, PA 19061 (610) 364-8000

January 11, 2017

Mr. James Rebarchak
Regional Manager - Air Quality
Commonwealth of Pennsylvania
Pennsylvania Depart of Environmental Protection
2 East Main St.
Norristown, PA 19401

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JAN 3 1 2017

Air Protection Division

RE: MONROE ENERGY TRAINER REFINERY 2016 SEMI ANNUAL LDAR REPORTS

Dear Mr. Rebarchak:

As required by Title 40, Part 60 Monroe Energy Trainer Refinery hereby submits the following Semi-Annual LDAR Reports for the time period July 1, 2016 to December 31, 2016

- 1. NSPS LDAR Report, per 40 CFR §60.480, Subpart VV:
 - Compliance Monitoring Summary
 - Compliance Repair Delay List
 - Repair Delayed History Components Repaired During Reporting Period
 - Summary of Components Added and Deleted During Reporting Period
- 2. REFINERY MACT LDAR Report, per 40 CFR, Part 63, Subpart CC:
 - Compliance Monitoring Summary
 - Compliance Repair Delay List
 - Repair Delayed History Components Repaired During Reporting Period.
 - Summary of Components Added and Deleted During Reporting Period.
- 3. GGGa LDAR Report, per 40 CFR §60.590a, Subpart GGGa:
 - Compliance Monitoring Summary
 - Compliance Repair Delay List
 - Repair Delayed History Components Repaired During Reporting Period.
 - Summary of Components Added and Deleted During Reporting Period.

As required by the Consent Decree H-05-0258, paragraph 236, Monroe Energy is hereby notifying you that the report leak rates contained herein for valves and pumps are the applicable regulatory leak definitions in Title 40 CFR, 60.482.

In addition to the aforementioned Consent Decree, all valves with a leak rate of over 10,000 ppm that required a Drill and Tap were successfully repaired to a leak rate less than 500 ppm and were not placed on Delay of Repair list.

Subject to the penalties of Title 18 Pa. C.S. Section 4904 and 35 P.S. Section 4009 (b) (2), I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this form are true, accurate, and complete.

Should you have any questions or comments regarding this report, please contact Stephani Ski Szymanski, Environmental Engineer and Program Lead, at (610) 364-8073.

Sincerel

Jeffrey K. Warmann CEO and President

Enclosures (1)

Cc: Ms. Zelma Maldonado

Associate Director,
Office of Air Enforcement,

Compliance and Assistance USEPA Region III

Air Protection Division

3AP20

1650 Arch Street

Philadelphia, Pa 19103-1129

MONROE ENERGY TRAINER REFINERY NSPS EPAVV/GGG LDAR SEMI ANNUAL REPORT SUMMARY

REPORT DATE: JANUARY 06, 2017

REPORT PERIOD: JULY 01 2016 - DECEMBER 31, 2016

UNIT	CLASS	MONTH	MONITORED	LEAKED	ON DOR/ NOT A LATE REPAIR
543 CRUDE					
	PUMP	7	4	0	0
	PUMP	8	4	0	0
	PUMP	9	4	0	0
	PUMP	10	4	0	0
	PUMP	11	4	0	0
	PUMP	12	4	0	0
	RELIEF	8	8	0	0
	RELIEF	11	8	0	0
	VALVE	7	39	0	0
	VALVE	8	1,079	0	0
	VALVE	9	1	0	0
	VALVE	10	1	0	0
	VALVE	11	1,085	0	0
	VALVE	12	13	0	0
			<u>2,258</u>	<u>0</u>	<u>o</u>
544 CRUDE					
	PUMP	7	15	0	0
	PUMP	8	15	0	0
	PUMP	9	15	0	0
	PUMP	10	15	0	0
	PUMP	11	15	0	0
	PUMP	12	15	0	0
	RELIEF	7	1	0	0
	RELIEF	8	8	0	0
	RELIEF	11	8	0	0
	VALVE	7	24	0	0
	VALVE	8	1,174	0	0
	VALVE	9	5	0	0
	VALVE	10	5	0	0
	VALVE	11	1,174	0	0
	VALVE	12	13	0	0
			2,502	<u>o</u>	<u>o</u>
544 VACUUM					
	PUMP	7	2	0	0

	PUMP	8	2	0	0
	PUMP	9	2	0	0
	PUMP	10	2	0	0
	PUMP	11	2	0	0
	PUMP	12	2	0	0
	RELIEF	8	7	0	0
	RELIEF	11	7	0	0
	VALVE	8	392	0	0
	VALVE	11	394	0	0
	VALVE	12	5	0	0
			<u>817</u>	<u>o</u>	<u>o</u>
ALKY					
	CONECT	8	1	0	0
	CONECT	11	1	1	
	PUMP	7	28	0	0
	PUMP	8	28	0	0
	PUMP	9	28	0	0
	PUMP	10	28	0	0
	PUMP	11	27	1	0
	PUMP	12	26	0	1
	RELIEF	8	39	0	0
	RELIEF	11	36	0	0
	RELIEF	12	4	0	0
	VALVE	7	42	0	0
	VALVE	8	3,407	2	0
	VALVE	9	6	0	0
	VALVE	10	1	0	0
	VALVE	11	3,336	7	0
	VALVE	12	38	0	1 0
			<u>7,076</u>	<u>11</u>	2
AMINE			11010	<u></u>	<u>2</u>
	PUMP	7	2		
	PUMP	8	2	0	0
	PUMP	9	2	0	0
	PUMP	10	2	0	0
	PUMP	11	2	0	0
	PUMP	12	2	0	0
	RELIEF	7	2	0	0
	RELIEF	10	6	0	0
	VALVE	7	6	0	0
	VALVE	10	357	0	0
	VALVE	11	358	0	0
		11	1	0	0
			<u>740</u>	<u>0</u>	<u>o</u>

<u>AWWTP</u>					
·	VALVE	7	140	0	0
	VALVE	10	140	0	0
			<u>280</u>	<u>o</u>	<u>0</u>
BLEND					
	PUMP	7	16	0	0
	PUMP	8	16	0	0
	PUMP	9	16	0	0
	PUMP	10	16	0	0
	PUMP	11	16	0	0
	PUMP	12	16	0	0
	RELIEF	7	16	0	0
	RELIEF	10	20	0	0
	RELIEF	12	3	0	0
	VALVE	7	1,263	0	0
	VALVE	10	1,307	1	0
	VALVE	11	82	1	0
	VALVE	12	4	0	0
			<u>2,791</u>	<u>2</u>	<u>0</u>
BOILER					
	RELIEF	9			
	RELIEF	12	1	0	0
	VALVE	9	1 78	0	0
	VALVE	12	78	0	0
			<u>158</u>	0	
			100	<u>0</u>	<u>0</u>
BUTANE					
	RELIEF	8	7	0	0
	RELIEF	11	7	0	0
	VALVE	8	302	0	0
	VALVE	10	7	0	0
	VALVE	11	304	1	0
	VALVE	12	1	0	0
			<u>628</u>	<u>1</u>	<u>o</u>
DESALT					
	PUMP	7	10	0	0
	PUMP	8	9	0	0
	PUMP	9	9	0	0
	PUMP	10	9	0	0
	PUMP	11	9	0	0
	PUMP	12	10	0	0
	RELIEF	7	12	0	0
	RELIEF	10	12	0	0

	VALVE	7	811	0	0
	VALVE	10	807	0	0
			1,698	<u>o</u>	<u>o</u>
DIESEL					
0.	PUMP	7	11	0	
	PUMP	8	11	0	0
	PUMP	9	11	0	0
	PUMP	10	11	0	0
	PUMP	11	11	0	0
	PUMP	12	11	0	0
	RELIEF	7	11	0	0
	RELIEF	10	9	0	0
	VALVE	7	806	0	0
	VALVE	10	792	0	0
			1,684	<u>o</u>	<u>0</u>
FCC					
	PUMP	7			
	PUMP	8	25	0	0
	PUMP	9	25	0	0
	PUMP	10	25	0	0
	PUMP	11	7	0	0
	PUMP	12	25 24	0	0
	RELIEF	7	1	0	0
	RELIEF	8	33	0 0	0
	RELIEF	11	33	1	0
	RELIEF	12	2	0	1
	VALVE	7	21	0	0
	VALVE	8	2,290	2	0
	VALVE	9	15	0	0
	VALVE	11	2,296	0	0
	VALVE	12	30	0	0
					× 37 0
			<u>4,852</u>	<u>3</u>	<u>1</u>
FLARE					<u>⊒</u> 8
	PUMP	7	•		
	PUMP	8	3	0	0
	PUMP	9	3	0	0
	PUMP	10	3 3	0	0
	PUMP	11	3	0	0
	PUMP	12	3	0	0
	VALVE	7	6	0 0	0
	VALVE	9	221	0	0
	VALVE	12	221	0	0
				· ·	0
			<u>466</u>	<u>o</u>	<u>o</u>
			Section 19	-	<u> </u>

<u>ISOCRK</u>					
	COMPR	7	1	0	0
	COMPR	8	1	0	0
	COMPR	9	1	0	0
	COMPR	10	1	0	0
	COMPR	12	1	0	0
	CONECT	11	1	1	0
	PUMP	7	18	0	0
	PUMP	8	18	0	0
	PUMP	9	18	0	0
	PUMP	10	18	0	0
	PUMP	11	18	0	0
	PUMP	12	18	0	0
	RELIEF	7	56	0	0
	RELIEF	10	56	0	0
	VALVE	7	3,118	0	0
	VALVE	8	6	0	0
	VALVE	9	9	0	0
	VALVE	10	3,122	1	0
	VALVE	11	4	0	0
	VALVE	12	5	0	0
				,,,,,,	Ü
			6,490	<u>2</u>	<u>0</u>
KERO					_
KERO	DUMB				
	PUMP	7	9	0	0
	PUMP	8	9	0	0
	PUMP	9	9	0	0
	PUMP	10	9	0	0
	PUMP	11	9	0	0
	PUMP	12	9	0	0
	RELIEF	7	30	0	0
	RELIEF	10	30	0	0
	VALVE	7	1,519	0	0
	VALVE	10	1,528	1	0
	VALVE	11	12	1	0
	VALVE	12	8	0	0
			<u>3,181</u>	<u>2</u>	<u>o</u>
LOWLN					
<u> LOWEN</u>	PUMP	7	•	97223	
	PUMP	8	6	0	0
	PUMP	9	6	0	0
	PUMP	10	6	0	0
	PUMP	11	6	0	0
	PUMP	12	6	0	0
	RELIEF	7	6	0	0
	INCLIEF	T^{-}	6	0	0

	RELIEF	10	6	0	0
	VALVE	7	578	0	0
	VALVE	10	574	0	0
			1,200	<u>0</u>	<u>0</u>
MARINE					
	PUMP	7	2	0	0
	PUMP	8	2	0	0
	PUMP	9	2	0	0
	PUMP	10	2	0	0
	PUMP	11	2	0	0
	PUMP	12	2	0	0
	RELIEF	8	10	0	0
	RELIEF	11	10	0	0
	VALVE	7	76	0	0
	VALVE	8	284	0	0
	VALVE	11	291	1	0
	VALVE	12	12	0	0
			<u>695</u>	<u>1</u>	<u>o</u>
<u>NAPHTH</u>					
	CONECT	12	1	1	0
	PUMP	7	16	0	0
	PUMP	8	16	0	0
	PUMP	9	16	0	0
	PUMP	10	16	0	0
	PUMP	11	16	0	0
	PUMP	12	16	0	0
	RELIEF	9	13	0	0
	RELIEF	12	13	0	0
	VALVE	7	4	0	0
	VALVE	8	2	0	0
	VALVE VALVE	9	1,508	2	0
	VALVE	10	3	0	0
	VALVE	11	3	0	0
	VALVE	12	1,510	0	0
			<u>3,153</u>	<u>3</u>	<u>o</u>
<u>PLATFO</u>					
	COMPR	7	1	0	0
	COMPR	8	1	0	0
	COMPR	9	1	0	0
	COMPR	10	1	0	0
	COMPR	12	1	0	0
	PUMP	7	10	0	0
	PUMP	8	10	0	0
	PUMP	9	10	0	0

	PUMP	10	10	0	0
	PUMP	11	10	0	0
	PUMP	12	10	0	0
	RELIEF	9	30	0	0
	RELIEF	12	30	1	
	VALVE	7	6	0	1
	VALVE	8	4	0	0
	VALVE	9	2,192	0	0
	VALVE	10	6		0
	VALVE	11	20	0	0
	VALVE	12	2,191	1	0
		12	2,191	1	0
			4,544	<u>3</u>	<u>1</u>
PRORCL					
	PUMP	7	1	0	0
	PUMP	8	1	0	0
	PUMP	9	1	0	
	PUMP	10	1	0	0
	PUMP	11	1	0	0
	PUMP	12	1	0	0
	RELIEF	9	3		0
	RELIEF	12	4	0	0
	VALVE	7	3	1	0
	VALVE	8	35	0	0
	VALVE	9		0	0
	VALVE	10	330	3	0
	VALVE	11	4	0	0
	VALVE	12	3	2	0
	***************************************	12	331	1	0
			<u>719</u>	<u>7</u>	<u>o</u>
PROREC					
S	CONECT	11	-	721	
	RELIEF	8	1	1	0
	RELIEF	11	12	0	0
	VALVE	7	12	0	0
	VALVE	8	4	0	0
	VALVE	11	643	0	0
	VALVE		645	4	1
	VALVE	12	6	0	0
			<u>1,323</u>	<u>5</u>	<u>1</u>
PROSTO					
	CONECT	10	1	1	0
	CONECT	11	1	0	0
	PUMP	7	6	0	0
	PUMP	8	6	0	0
	PUMP	9	6	0	0

	PUMP	10	6	0	0
	PUMP	11	6	0	0
	PUMP	12	6	0	0
	RELIEF	7	20	0	0
	RELIEF	10	20	0	0
	VALVE	7	518	0	0
	VALVE	8	32	0	0
	VALVE	9	2	0	0
	VALVE	10	531	1	0
	VALVE	11	17	0	0
	VALVE	12	5	0	0
				ŭ	9
			1,183	<u>2</u>	<u>o</u>
DEFORM			a nd and a ll		≥
REFORM	D				
	PUMP	7	8	0	0
	PUMP	8	8	0	0
	PUMP	9	8	0	0
	PUMP	10	8	0	0
	PUMP	11	8	0	0
	PUMP	12	8	0	0
	RELIEF	8	11	0	0
	RELIEF	11	11	0	0
	VALVE	7	1	0	0
	VALVE	8	826	0	0
	VALVE	11	826	2	0
	VALVE	12	3	0	0
			<u>1,726</u>	<u>2</u>	<u>o</u>
SOUR WATER					
	RELIEF	8			
	RELIEF	11	2	0	0
	RELIEF	12	2	1	1
	VALVE	8	1	0	0
	VALVE	11	53	0	0
			53	0	0
			<u>111</u>		
			111	<u>1</u>	1
SOUTH TANK FA	RM				
	PUMP	7	28	0	0
	PUMP	8	28	0	0
	PUMP	9	26	0	0
	PUMP	10	25	0	0
	PUMP	11	25	0	0
	PUMP	12	24	0	0
	RELIEF	8	2	0	0
	RELIEF	9	22	0	0
	RELIEF	12	25	0	0
					

	VALVE	7	90	0	0
	VALVE	8	76	0	0
	VALVE	9	2,612	0	0
	VALVE	10	211	0	0
	VALVE	11	23	1	0
	VALVE	12	2,561	2	0
			<u>5,778</u>	<u>3</u>	<u>0</u>
SRU				-	₹
4	RELIEF	7	2	•	Lann.
	RELIEF	10	3 3	0	0
	VALVE	7	78	0	0
	VALVE	10	78	0 0	0
			7.0%	Ü	0
			<u>162</u>	<u>0</u>	<u>0</u>
TAIL GAS					
	CONECT	10	1	1	0
	RELIEF	7	3	0	0
	RELIEF	10	3	0	0
	VALVE	7	159	0	0
	VALVE	10	159	0	0
			<u>325</u>	-4	
<u>TF</u>			<u>525</u>	1	<u>o</u>
	PUMP	7	40		
	PUMP	8	10	0	0
	PUMP	9	10 10	0	0
	PUMP	10	10	0	0
	PUMP	11	10	0	0
	PUMP	12	10	0	0
	RELIEF	7	1	0	0
	VALVE	, 7	14	0	0
	VALVE	9	862	0	0
	VALVE	12	833	0	0
			4.770	•0	
			<u>1,770</u>	<u>0</u>	<u>0</u>
VACUUM	2				
	CONECT	12	1	1	0
	PUMP	7	2	0	0
	PUMP	8	2	0	0
	PUMP PUMP	9	2	0	0
	PUMP	10	2	0	0
	PUMP	11	2	0	0
	RELIEF	12	2	0	0
	RELIEF	7	3	0	0
	INCLIEF	10	3	0	0

		TOTAL:	60,599	51	6
			<u>1,276</u>	1	<u>0</u>
	VALVE	12	3	0	0
	VALVE	11	3	0	0
	VALVE	10	616	0	0
	VALVE	9	4	0	0
	VALVE	8	4	0	0
	VALVE	7	617	0	0
	VALVE	10	11	0	0
	RELIEF	7	11	0	0
	RELIEF	12	1	0	0
	PUMP	11	1	0	0
	PUMP PUMP	10	1	0	0
	PUMP	9	1	0	0
	PUMP	8	1	0	0
	PUMP	7	1	0	0
	CONECT	10	1	1	0
<u>VGO</u>	405.000				
			<u>1,013</u>	1	<u>o</u>
	WEVE	12	6	0	0
	VALVE		494	0	0
	VALVE	10	494	0	0
	VALVE	7	104 a . 10		

LDAR ON DELAY OF REPAIR

NSPS VV/GGG REPORT REPORT DATE: 01/06/2017

UNIT	TAG	CLASS	PLACED ON DELAY
ALKY	18680	PUMP	11/22/2016
ALKY	20472	VALVE	12/6/2016
FCC	22957	RELIEF	12/1/2016
PLATFO	10003	RELIEF	12/16/2016
PROREC	17101	VALVE	11/22/2016
SOUR WATER	4526	RELIEF	11/30/2016
			6

REMOVED FROM DELAY OF REPAIR

NSPS VV/GGG REPORT

REPORT DATE: 01/06/2017

UNIT	TAG	CLASS	OFF OF DELAY
ALKY	18680	PUMP	OFF OF DELAY
ISOCRK	15140		12/21/2016
NAPTHA		VALVE	9/8/2016
	200011A	CONNECT	12/3/2016
PLATFO	10003	RELIEF	12/27/2016
			4

ADDED AND DELETED NSPS VV/GGG REPORT REPORT DATE: 01/06/2017

STATES	REPORT COMPLIANCE PERIOD: 07/01/2016 - 12/31/2016					
543 CRUDE PRESSURE RELIEF DEVICE 0 0 543 CRUDE PUMP 0 0 543 CRUDE VALVE 8 4 544 CRUDE PRESSURE RELIEF DEVICE 0 0 544 CRUDE PUMP 0 0 544 CRUDE VALVE 1 1 544 CRUDE VALVE 1 1 544 VACUUM PRESSURE RELIEF DEVICE 0 0 544 VACUUM PUMP 0 0 544 VACUUM VALVE 3 1 ALKY CONNECTOR 2 0 ALKY PUMP 1 1 1 ALKY PUMP 1 1 1 1 ALKY PUMP 0 0 0 0 0 0 AMINE PRESSURE RELIEF DEVICE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UNIT	CLASS	ADDED	DELETED.		
543 CRUDE PUMP 0 0 543 CRUDE VALVE 8 4 544 CRUDE PRESSURE RELIEF DEVICE 0 0 544 CRUDE PUMP 0 0 544 VACUUM PRESSURE RELIEF DEVICE 1 1 544 VACUUM PUMP 0 0 ALKY CONNECTOR 2 0 ALKY PESSURE RELIEF DEVICE 2 0 ALKY PUMP 1 1 1 AMINE PRESSURE RELIEF DEVICE 0 0 0 AWWTP VALVE 1 0 0 BLEND PRESSURE RELIEF DEVICE 3 1 1 BLEND PRESSURE RELIEF DEVICE 0 0 0 BUTANE PRESSURE RELI	543 CRUDE	PRESSURE RELIEF DEVICE				
543 CRUDE VALVE 8 4 544 CRUDE PRESSURE RELIEF DEVICE 0 0 544 CRUDE VALVE 1 1 544 CRUDE VALVE 1 1 544 VACUUM PRESSURE RELIEF DEVICE 0 0 544 VACUUM VALVE 3 1 ALKY CONNECTOR 2 0 ALKY PRESSURE RELIEF DEVICE 2 0 ALKY PUMP 1 1 1 ALKY PUMP 1 1 1 1 ALKY PUMP 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
544 CRUDE PRESSURE RELIEF DEVICE 0 0 544 CRUDE PUMP 0 0 544 CRUDE VALVE 1 1 544 VACUUM PRESSURE RELIEF DEVICE 0 0 544 VACUUM PUMP 0 0 544 VACUUM PUMP 0 0 544 VACUUM PUMP 0 0 ALKY CONNECTOR 2 0 ALKY PUMP 1 1 ALKY PUMP 1 1 1 AMINE PRESSURE RELIEF DEVICE 0 0 0 AMINE PUMP 0 0 0 0 AWWTP VALVE 1 0 0 0 BLEND CONNECTOR 0 0 0 0 BLEND PRESSURE RELIEF DEVICE 0 0 0 0 0 BUTANE PRESSURE RELIEF DEVICE 0 0 0 0 0 0						
544 CRUDE PUMP 0 0 544 CRUDE VALVE 1 1 544 VACUUM PRESSURE RELIEF DEVICE 0 0 544 VACUUM PUMP 0 0 544 VACUUM VALVE 3 1 ALKY POMP 1 1 ALKY PUMP 1 1 AMINE PRESSURE RELIEF DEVICE 0 0 AMINE PRESSURE RELIEF DEVICE 0 0 BLEND VALVE 1 0 0 BLEND POMP 1 1 1 BLEND PRESSURE RELIEF DEVICE 3 1 1 BLEND PUMP 1 1 1 BUTANE						
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FCC				0		
FLARE PUMP 0 0 0 FLARE VALVE 0 0 0 ISOCRK COMPRESSOR 0 0				-		
FLARE VALVE 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				14		
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ISOCRK CONNECTOR				W-5-4		
1 0						
	2005000000	SOUNTEDTON	1	0		

ISOCRK ISOCRK ISOCRK KERO KERO KERO KERO KERO LOWLN LOWLN LOWLN LOWLN LOWLN MARINE MARINE MARINE MARINE MARINE MAPHTH NAPHTH NAPHTH NAPHTH NAPHTH NAPHTH NAPHTH OYF PLATFO PLATFO PLATFO PLATFO PLATFO PLATFO PLATFO PLATFO PLATFO PRORCL	PRESSURE RELIEF DEVICE PUMP VALVE COMPRESSOR CONNECTOR PRESSURE RELIEF DEVICE PUMP VALVE PRESSURE RELIEF DEVICE	0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
REFORM	PRESSURE RELIEF DEVICE	0	0
	10.000	0	0
	PRESSURE RELIEF DEVICE	0	0
SOUR WATER SOUR WATER	PUMP VALVE	0	Ö
SOUTH TANK FARM	COMPRESSOR	0 0	0
SOUTH TANK FARM	CONNECTOR	0	0
SOUTH TANK FARM	PRESSURE RELIEF DEVICE	7	4
SOUTH TANK FARM SOUTH TANK FARM	PUMP	0	4
SRU	VALVE	293	234
SRU	COMPRESSOR	0	0
SRU	PRESSURE RELIEF DEVICE VALVE	0	0
55.00 (20.70)	VALVE	0	0

SUNOL SUNOL SUNOL TAIL GAS TAIL GAS TAIL GAS TF TF	CONNECTOR PRESSURE RELIEF DEVICE VALVE CONNECTOR PRESSURE RELIEF DEVICE VALVE CONNECTOR PRESSURE RELIEF DEVICE PUMP VALVE	0 0 1 0 0 0 0	0 0 0 0 0 0 1 0
VACUUM	CONNECTOR	1	42 0
VACUUM VACUUM	PRESSURE RELIEF DEVICE PUMP	0	0
VACUUM	VALVE	0	0
VGO	COMPRESSOR	2	1
VGO	CONNECTOR	1	0
VGO VGO	PRESSURE RELIEF DEVICE	Ö	0
VGO	PUMP	0	0
WGS	VALVE CONNECTOR	0	8
WGS	VALVE	0	0
	TOTAL	0	0
	TOTAL	679	427

MONROE ENERGY TRAINER REFINERY REFMACT (HAP UNITS) LDAR SEMI ANNUAL REPORT

SUMMARY

REPORT DATE: JANUARY 6, 2017

REPORT PERIOD: JULY 1 2016 - DECEMBER 31, 2016

UNIT	CLASS	MONTH	MONITORED	LEAKED	ON DOR/ NOT
			MOUNTOKED	LLANED	A LATE
					REPAIR
E42 CRUDE					Charles of a large of
543 CRUDE	DUMD				
	PUMP	7	4	0	0
	PUMP	8	4	0	0
	PUMP	9	4	0	0
	PUMP	10	4	0	0
	PUMP	11	4	0	0
	PUMP	12	4	0	0
	RELIEF	8	8	0	0
	RELIEF	11	8	0	0
	VALVE	7	39	0	0
	VALVE	8	1,079	0	0
	VALVE	9	1	0	0
	VALVE	10	1	0	0
	VALVE	11	1,085	0	0
	VALVE	12	13	0	0
			<u>2,258</u>	<u>o</u>	<u>0</u>
544 CRUDE					
	PUMP	7	15	0	0
	PUMP	8	15	0	0
	PUMP	9	15	0	0
	PUMP	10	15	0	0
	PUMP	11	15	0	0
	PUMP	12	15	0	0
	RELIEF	7	1	0	0
	RELIEF	8	8		0
	RELIEF	11	8	0	0
	VALVE	7	24	0	0
	VALVE	8	1,174	0	0
	VALVE	9	5	0	0
	VALVE	10		0	0
	VALVE	11	5 1,174	0	0
	VALVE	12	1,174	0	0
	VALVE	12	13	0	0
			2,502	0	0
			<u>L,our</u>	<u>0</u>	<u>o</u>
544 VACUUM					

REFMACT HAP UNITS IN BLUE

	PUMP	7	2	0	
	PUMP	8		0	0
	PUMP		2	0	0
		9	2	0	0
	PUMP	10	2	0	0
	PUMP	11	2	0	0
	PUMP	12	2	0	0
	RELIEF	8	7	0	0
	RELIEF	11	7	0	0
	VALVE	8	392	0	0
	VALVE	11	394	0	0
	VALVE	12	5	0	0
			<u>817</u>	<u>0</u>	<u>0</u>
ALKY					
ALKI	CONECT				
		8	1	0	0
	CONECT	11	1	1	0
	PUMP	7	28	0	0
	PUMP	8	28	0	0
	PUMP	9	28	0	0
	PUMP	10	28	0	0
	PUMP	11	27	1	-1
	PUMP	12	26	0	0
	RELIEF	8	39	0	0
	RELIEF	11	36	0	0
	RELIEF	12	4	0	0
	VALVE	7	42	0	0
	VALVE	8	3,407	2	0
	VALVE	9	6	0	0
	VALVE	10	1	0	0
	VALVE	11	3,336	7	1
	VALVE	12	38	0	0
			7,076	11	<u>2</u>
AMINE					
	PUMP	7	2	0	0
	PUMP	8	2	0	0
	PUMP	9	2	0	0
	PUMP	10	2	0	0
	PUMP	11	2	0	0
	PUMP	12	2	0	0
	RELIEF	7	6	0	0
	RELIEF	10	6	0	0
	VALVE	7	357	0	0
	VALVE	10	358	0	0
	VALVE	11	1	0	0

			<u>740</u>	<u>0</u>	<u>0</u>
AWWTP					
	VALVE	7	140	0	•
	VALVE	10	140	0	0
	***************************************	10	140	0	0
			280	<u>o</u>	0
			200	<u>u</u>	<u>0</u>
BLEND					
	PUMP	7	16	0	0
	PUMP	8	16	0	0
	PUMP	9	16	0	0
	PUMP	10	16	0	0
	PUMP	11	16	0	0
	PUMP	12	16	0	0
	RELIEF	7	16	0	0
	RELIEF	10	20	0	0
	RELIEF	12	3	0	0
	VALVE	7	1,263	0	0
	VALVE	10	1,307	1	0
	VALVE	11	82	1	0
	VALVE	12	4	0	0
			2,791	<u>2</u>	<u>o</u>
BOILER					
BOILLIN	RELIEF		200		
	RELIEF	9	1	0	0
	VALVE	12	1	0	0
	VALVE	9	78	0	0
	VALVE	12	78	0	0
			450		
			<u>158</u>	<u>o</u>	<u>o</u>
BUTANE					
	RELIEF	8	7	0	0
	RELIEF	11	7	0	0
	VALVE	8	302	0	0
	VALVE	10	7	0	0
	VALVE	11	304	1	0
	VALVE	12	1	0	0
			ž*	.	J
			628	<u>1</u>	<u>o</u>
DE0.::-			A-2-31		<u>~</u>
DESALT					
	PUMP	7	10	0	0
	PUMP	8	9	0	0
	PUMP	9	9	0	0
	PUMP	10	9	0	0
	PUMP	11	9		

	PUMP	12	10	0	0
	RELIEF	7	12	0	0
	RELIEF	10	12	0	0
	VALVE	7	811	0	0
	VALVE	10	807	0	0
			1,698	<u>o</u>	<u>o</u>
DIESEL				_	_
DIESEL	51115				
	PUMP	7	11	0	0
	PUMP	8	11	0	0
	PUMP	9	11	0	0
	PUMP	10	11	0	0
	PUMP	11	11	0	0
	PUMP	12	11	0	0
	RELIEF	7	11	0	0
	RELIEF	10	9	0	0
	VALVE	7	806	0	0
	VALVE	10	792	0	0
			<u>1,684</u>	<u>o</u>	<u>o</u>
FCC				<u>,=</u> ;	_
100					
	PUMP	7	25	0	0
	PUMP	8	25	0	0
	PUMP	9	25	0	0
	PUMP	10	7	0	0
	PUMP	11	25	0	0
	PUMP	12	24	0	0
	RELIEF	7	1	0	0
	RELIEF	8	33	0	0
	RELIEF	11	33	1	1
	RELIEF	12	2	0	0
	VALVE	7	21	0	0
	VALVE	8	2,290	2	0
	VALVE	9	15	0	0
	VALVE	11	2,296	0	0
	VALVE	12	30	0	0
			4,852	<u>3</u>	1
FLARE					
LAKE	DUM	~			
	PUMP	7	3	0	0
	PUMP	8	3	0	0
	PUMP	9	3	0	0
	PUMP	10	3	0	0
	PUMP	11	3	0	0
	PUMP	12	3	0	0

	VALVE	7	6		
	VALVE	9	221	0	0
	VALVE	12		0	0
		12	221	0	0
			466	<u>o</u>	<u>0</u>
ISOCRK					
	COMPR	7			
	COMPR	8	1	0	0
	COMPR	9	1	0	0
	COMPR	10	1	0	0
	COMPR	12	1		0
	CONECT	11	1	0	0
	PUMP	7	18	1	0
	PUMP	8	18	0	0
	PUMP	9	18	0	0
	PUMP	10	18	0	0
	PUMP	11	18	0	0
	PUMP	12	18	0	0
	RELIEF	7	56	0	0
	RELIEF	10	56	0	0
	VALVE	7	3,118	0	0
	VALVE	8	6	0	0
	VALVE	9	9	0	0
	VALVE	10	3,122	1	0
	VALVE	11	4	o	0
	VALVE	12	5	0	0
					0
			<u>6,490</u>	<u>2</u>	<u>o</u>
KERO/HCN					
	PUMP	7	9	0	
	PUMP	8	9	0	0
	PUMP	9	9	0	0
	PUMP	10	9	0	0
	PUMP	11	9	0	0
	PUMP	12	9	0	0
	RELIEF	7	30	0	0
	RELIEF	10	30	0	0
	VALVE	7	1,519	0	0
	VALVE	10	1,528	1	0
	VALVE	11	12	1	0
	VALVE	12	8	0	0
					U
			<u>3,181</u>	<u>2</u>	<u>o</u>
LOWLN					
	PUMP	7			
	20 MINISTERS	•	6	0	0

	PUMP	8	6	0	
	PUMP	9	6	0	0
	PUMP	10	6	0	0
	PUMP	11	6	0	0
	PUMP	12	6	0	0
	RELIEF	7	6	0	0
	RELIEF	10	6	0	0
	VALVE	7	578	0	0
	VALVE	10	574	0	0
			3/4	0	0
			1,200	<u>o</u>	<u>0</u>
MARINE					: -
	PUMP	7			
	PUMP	8	2	0	0
	PUMP	9	2	0	0
	PUMP	10	2	0	0
	PUMP	11	2	0	0
	PUMP	12	2	0	0
	RELIEF	8	2	0	0
	RELIEF		10	0	0
	VALVE	11	10	0	0
	VALVE	7	76	0	0
	VALVE	8	284	0	0
	VALVE	11	291	1	0
	VALVE	12	12	0	0
			<u>695</u>	1	<u>0</u>
NAPHTH					
	CONECT	12	terineral land		
	PUMP	7	1 16	1	0
	PUMP	8	16	0	0
	PUMP	9		0	0
	PUMP	10	16	0	0
	PUMP	11	16	0	0
	PUMP	12	16	0	0
	RELIEF	9	16	0	0
	RELIEF	12	13	0	0
	VALVE	7	13	0	0
	VALVE	8	4	0	0
	VALVE	9	2	0	0
	VALVE	10	1,508	2	0
	VALVE	11	3	0	0
	VALVE	12	3	0	0
		12	1,510	0	0
			<u>3,153</u>	<u>3</u>	<u>o</u>
<u>PLATFO</u>					

	COMPR	7	1	0	0
	COMPR	8	1	0	0
	COMPR	9	1	0	0
	COMPR	10	1	0	0
	COMPR	12	1	0	0
	PUMP	7	10	0	0
	PUMP	8	10	0	0
	PUMP	9	10	0	0
	PUMP	10	10	0	0
	PUMP	11	10	0	0
	PUMP	12	10	0	0
	RELIEF	9	30	0	0
	RELIEF	12	30	1	1
	VALVE	7	6	0	0
	VALVE	8	4	0	0
	VALVE	9	2,192	0	0
	VALVE	10	6	0	0
	VALVE	11	20	1	0
	VALVE	12	2,191	1	0
			4,544	<u>3</u>	1
PRORCL					
	PUMP	7	1	0	4
	PUMP	8	1	0	0
	PUMP	9	1		0
	PUMP	10	1	0	0
	PUMP	11	1		0
	PUMP	12	4	0	0
	RELIEF	9	3	0	0
	RELIEF	12	4	0	0
	VALVE	7	3	1	0
	VALVE	8	35	0	0
	VALVE	9	330	0	0
	VALVE	10	4	3 0	0
	VALVE	11	3	2	0
	VALVE	12	331	1	0
					0
			<u>719</u>	7	<u>o</u>
PROREC					
PROREC	CONECT	11	ň	4	res
PROREC	CONECT RELIEF	11 8	1 12	1	0
<u>PROREC</u>		8	12	0	0
PROREC	RELIEF	8 11	12 12	0	0
PROREC	RELIEF RELIEF	8 11 7	12 12 4	0 0 0	0 0 0
PROREC	RELIEF RELIEF VALVE	8 11	12 12	0	0

			1,323	<u>5</u>	<u>1</u>
PROSTO					7,
	CONECT	10	4		
	CONECT	11	1	1	0
	PUMP	7	1	0	0
	PUMP	8	6	0	0
	PUMP	9	6	0	0
	PUMP	10	6	0	0
	PUMP	11	6	0	0
	PUMP	12	6	0	0
	RELIEF	7	6	0	0
	RELIEF	10	20	0	0
	VALVE	7	20	0	0
	VALVE		518	0	0
	VALVE	8 9	32	0	0
	VALVE		2	0	0
	VALVE	10 11	531	1	0
	VALVE		17	0	0
	VALVE	12	5	0	0
			<u>1,183</u>	<u>2</u>	<u>o</u>
REFORM					
	PUMP	7	8	•	
	PUMP	8	8	0	0
	PUMP	9	8	0	0
	PUMP	10	8	0	0
	PUMP	11	8	0	0
	PUMP	12	8	0	0
	RELIEF	8	11	0	0
	RELIEF	11		0	0
	VALVE	7	11	0	0
	VALVE	8	1	0	0
	VALVE	11	826	0	0
	VALVE	12	826	2	0
		12	3	0	0
			1,726		
			1,720	2	<u>0</u>
SOUR					
	RELIEF	8	2	0	0
	RELIEF	11	2	1	1
	RELIEF	12	1	0	
	VALVE	8	53	0	0
	VALVE	11	53	0	0
					0
			111	1	The state of the s
			The state of the state of		1

SOUTH TANK F	ARM				
	PUMP	7	28		
	PUMP	8	28	0	0
	PUMP	9	26	0	0
	PUMP	10	25	0	0
	PUMP	11	25	0	0
	PUMP	12	24	0	0
	RELIEF	8	2	0	0
	RELIEF	9	22	o	
	RELIEF	12	25	0	0
	VALVE	7	90	0	0
	VALVE	8	76	0	0
	VALVE	9	2,612	0	0
	VALVE	10	211	0	0
	VALVE	11	23	1	0
	VALVE	12	2,561	2	0
			2,001	2	0
			<u>5,778</u>	<u>3</u>	•
CDU				<u> </u>	<u>o</u>
SRU					
	RELIEF	7	3	0	0
	RELIEF	10	3	0	0
	VALVE	7	78	0	0
	VALVE	10	78	0	0
			<u>162</u>	<u>o</u>	<u>o</u>
TAIL GAS					
	CONECT	10			
	RELIEF	7	1	1	0
	RELIEF	10	3	0	0
	VALVE	7	3	0	0
	VALVE	10	159	0	0
	77.272	10	159	0	0
			205		
			325	1	<u>0</u>
<u>TF</u>					
	PUMP	7	10	0	0
	PUMP	8	10	0	0
	PUMP	9	10	0	
	PUMP	10	10	0	0
		11	10	0	0
	PUMP				
	PUMP PUMP	12			
			10	0	0
	PUMP	12	10 1	0	0 0
	PUMP RELIEF	12 7	10 1 14	0 0 0	0 0 0
	PUMP RELIEF VALVE	12 7 7	10 1 14 862	0 0 0 0	0 0 0 0
	PUMP RELIEF VALVE VALVE	12 7 7 9	10 1 14	0 0 0	0 0 0

			1,770	<u>0</u>	<u>0</u>
VACUUM					
	CONECT	12	1		
	PUMP	7	1 2	1	0
	PUMP	8	2	0	0
	PUMP	9	2	0	0
	PUMP	10	2	0	0
	PUMP	11	2	0	0
	PUMP	12	2	0	0
	RELIEF	7	3	0	0
	RELIEF	10	3	0	0
	VALVE	7	494	0	0
	VALVE	10	494	0	0
	VALVE	12	6	0	0
					0
			1,013	1	<u>o</u>
<u>VGO</u>				_	<u>o</u>
<u>vGO</u>					
	CONECT	10	1	1	0
	PUMP	7	1	0	0
	PUMP	8	1	0	0
	PUMP	9	1	0	0
	PUMP	10	1	0	0
	PUMP	11	1	0	0
	PUMP	12	1	0	0
	RELIEF	7	11	0	0
	RELIEF	10	11	0	0
	VALVE	7	617	0	0
	VALVE	8	4	0	0
	VALVE	9	4	0	0
	VALVE	10	616	0	0
	VALVE	11	3	0	0
	VALVE	12	3	0	0
			<u>1,276</u>	1	<u>0</u>
		TOTAL:	60,599	51	6

LDAR ON DELAY OF REPAIR

REFMACT (HAP UNITS) LDAR REPORT

REPORT DATE: 01/06/2017

REPORT COMPLIANCE PERIOD: 07/01/2016 - 12/31/2016

JNIT	TAG	CLASS	PLACED ON DELAY
ALKY	18680	PUMP	11/22/2016
ALKY	20472	VALVE	
FCC	22957	RELIEF	12/06/2016
PLATFO	10003	RELIEF	12/01/2016
PROREC	17101	VALVE	12/16/2016
OUR WATER	4526		11/22/2016
	4320	RELIEF	11/30/2016
			6

REFMACT HAP UNITS IN BLUE

REMOVED FROM DELAY OF REPAIR

REFMACT HAP UNIT LDAR REPORT

REPORT DATE: 01/06/2017

REPORT COMPLIANCE PERIOD: 07/01/2016 - 12/31/2016

REFMACT HAP UNITS IN BLUE

UNIT	TAG	CLASS	
ALKY			OFF OF DELAY
ISOCRK	18680	PUMP	12/21/2016
	15140	VALVE	09/08/2016
NAPTHA	200011A	CONNECT	
PLATFO	10003		12/03/2016
	10003	RELIEF	12/27/2016
			4

ADDED AND DELETED

REFMACT HAP UNITS IN BLUE

REFMACT HAP UNITS LDAR REPORT

REPORT DATE: 01/06/2017

UNIT	NCE PERIOD: 07/01/2016 - 12/31/2016		
UNII	CLASS		
543 CRUDE	PRESSURE RELIEF DEVICE	0	DELETEI 0
543 CRUDE	PUMP	0	0
543 CRUDE	VALVE	8	4
544 CRUDE	PRESSURE RELIEF DEVICE	0	0
544 CRUDE	PUMP	0	0
544 CRUDE	VALVE	1	1
544 VACUUM	PRESSURE RELIEF DEVICE	Ó	
544 VACUUM	PUMP	0	0
544 VACUUM	VALVE	3	0
ALKY	CONNECTOR	2	1
ALKY	PRESSURE RELIEF DEVICE	2	0
ALKY	PUMP	1	0
ALKY	VALVE	21	1
AMINE	PRESSURE RELIEF DEVICE		23
AMINE	PUMP	0	0
AMINE	VALVE	0	0
AWWTP	VALVE	1	0
BLEND	CONNECTOR	0	0
BLEND	PRESSURE RELIEF DEVICE	0	0
BLEND	PUMP	3	1
BLEND	VALVE	1	1
BOILER	PRESSURE RELIEF DEVICE	82	48
BOILER	VALVE	0	0
BUTANE	PRESSURE RELIEF DEVICE	0	0
BUTANE	VALVE	0	0
CRUDE	CONNECTOR	7	2
CRUDE		0	0
CRUDE	PRESSURE RELIEF DEVICE PUMP	0	0
CRUDE		0	0
DESALT	VALVE	0	0
DESALT	CONNECTOR	0	0
DESALT	PRESSURE RELIEF DEVICE	0	0
DESALT	PUMP	0	0
DIESEL	VALVE	0	0
DIESEL	COMPRESSOR	0	0
DIESEL	CONNECTOR	0	0
DIESEL	PRESSURE RELIEF DEVICE	0	0
	PUMP	0	0
DIESEL	VALVE	0	1
	COMPRESSOR	0	0
CC	CONNECTOR	0	0
CC	PRESSURE RELIEF DEVICE	1	0
CC	PUMP	Ó	Ö
CC	VALVE	42	14
LARE	PUMP	0	0
LARE	VALVE	0	0
MUNDIA	COMPRESSOR		U
SOCRK SOCRK	COMPRESSOR	0	0

ICOODIA			
ISOCRK ISOCRK	PRESSURE RELIEF DEVICE	0	0
ISOCRK	PUMP	0	0
KERO	VALVE	6	1
KERO	COMPRESSOR	0	Ó
KERO	CONNECTOR	0	0
KERO	PRESSURE RELIEF DEVICE	0	0
KERO	PUMP	0	0
LOWLN	VALVE	18	10
LOWLN	COMPRESSOR	0	0
LOWLN	CONNECTOR	0	0
LOWLN	PRESSURE RELIEF DEVICE	0	0
LOWLN	PUMP	0	0
MARINE	VALVE	0	0
MARINE	COMPRESSOR	0	0
	CONNECTOR	0	o O
MARINE	PRESSURE RELIEF DEVICE	1	0
MARINE	PUMP	2	0
MARINE	VALVE	84	3
NAPHTH	COMPRESSOR	0	0
NAPHTH	CONNECTOR	1	0
NAPHTH	PRESSURE RELIEF DEVICE	Ó	0
NAPHTH	PUMP	0	0
NAPHTH	VALVE	13	12
OYF	VALVE	0	0
PLATFORM	COMPRESSOR	0	0
PLATFORM	CONNECTOR	0	0
PLATFORM	PRESSURE RELIEF DEVICE	0	0
PLATFORM	PUMP	0	0
PLATFORM	VALVE	1	2
PRORCL PRORCL	CONNECTOR	0	0
PRORCL	PRESSURE RELIEF DEVICE	1	1
PRORCL	PUMP	Ó	ó
PROREC	VALVE	34	0
PROREC	CONNECTOR	2	1
	PRESSURE RELIEF DEVICE	0	0
PROREC PROSTO	VALVE	2	0
PROSTO	CONNECTOR	2	0
PROSTO	PRESSURE RELIEF DEVICE	1	0
PROSTO	PUMP	0	0
REFORM	VALVE	20	5
	CONNECTOR	0	0
REFORM	PRESSURE RELIEF DEVICE	0	1
REFORM	PUMP	0	Ö
REFORM	VALVE	1	Ö
SOUR WATER	PRESSURE RELIEF DEVICE	0	O
SOUR WATER	PUMP	0	0
SOUR WATER	VALVE	0	0
SOUTH TANK FARM	COMPRESSOR	0	0
SOUTH TANK FARM	CONNECTOR	0	0
SOUTH TANK FARM	PRESSURE RELIEF DEVICE	7	4
SOUTH TANK FARM	PUMP	0	4
SOUTH TANK FARM	VALVE	293	234
SRU SRU	COMPRESSOR	0	0
SRU	PRESSURE RELIEF DEVICE	0	0
ONU	VALVE	0	0

SUNOL	CONNECTOR		
SUNOL		0	0
	PRESSURE RELIEF DEVICE	0	0
SUNOL	VALVE	0	0
TAIL GAS	CONNECTOR	1	0
TAIL GAS	PRESSURE RELIEF DEVICE	0	0
TAIL GAS	VALVE	0	0
TF	CONNECTOR	0	
TF	PRESSURE RELIEF DEVICE	0	0
TF	PUMP	0	
TF	VALVE	0	0
VACUUM	CONNECTOR	9	42
VACUUM		1	0
VACUUM	PRESSURE RELIEF DEVICE	0	0
	PUMP	0	0
VACUUM	VALVE	2	
VGO	COMPRESSOR	0	0
VGO	CONNECTOR	1	0
VGO	PRESSURE RELIEF DEVICE		0
VGO	PUMP	0	0
VGO	VALVE	0	0
WGS	CONNECTOR	0	8
WGS	VALVE	0	0
		0	0
	TOTAL	679	427

MONROE ENERGY TRAINER REPORT GGGa SEMI ANNUAL LDAR REPORT

SUMMARY

REPORT DATE: JANUARY 5, 2017

REPORT PERIOD: JULY 1, 2016 THRU DECEMBER 31, 2016

UNIT	CLASS	THRU DECEMB			
	CLASS	MONTH	MONITORED	LEAKE	LATE REPAIR
543 CRUDE					
	PUMP	7	4	0	0
	PUMP	8	4	0	0
	PUMP	9	4	0	0
	PUMP	10	4	0	0
	PUMP	11	4	0	0
	PUMP	12	4	0	0
	RELIEF	8	8	0	0
	RELIEF	11	8	0	0
	VALVE	7	39	0	0
	VALVE	8	1,079	1	0
	VALVE	9	1	0	0
	VALVE	10	1	0	0
	VALVE	11	1,085	5	0
	VALVE	12	13	0	0
			2,258	<u>6</u>	<u>o</u>
44 CRUDE					_
++ OKODE	PUMP				
	PUMP	7	15	0	0
	PUMP	8	15	0	0
	PUMP	9	15	0	0
	PUMP	10	15	0	0
	PUMP	11	15	0	0
	RELIEF	12	15	0	0
	RELIEF	7	1	0	0
	RELIEF	8	8	0	0
	VALVE	11	8	0	0
	VALVE	7	24	0	0
		8	1,174	5	0
	VALVE	9	5	0	0
	VALVE	10	5	0	0
	VALVE	11	1,174	13	0
	VALVE	12	13	1	0
			2,502	<u>19</u>	<u>0</u>
4 VACUUM					
	PUMP	7	2	0	0
	PUMP	8	2	0	0
	PUMP	9	2	0	0
			1570 1	•	U

	DIME				
	PUMP	10	2	0	0
	PUMP	11	2	0	0
	PUMP	12	2	0	0
	RELIEF RELIEF	8	7	0	0
		11	7	0	0
	VALVE VALVE	8	392	0	0
	VALVE	11	394	2	0
	***************************************	12	5	0	0
			<u>817</u>		
			<u>017</u>	<u>2</u>	<u>0</u>
BOILER 14					
	VALVE	7	48	0	0
	VALVE	8	1	0	0
	VALVE	9	49	0	0
	VALVE	12	49	5	0
			147	<u>5</u>	<u>0</u>
BOILERS 9 & 1	0				_
	CONECT	12	721		
	RELIEF	9	1	1	0
	RELIEF	12	4	0	0
	VALVE	7	4	0	0
	VALVE	8	5 1	0	0
	VALVE	9	434	0	0
	VALVE	10	1	0	0
	VALVE	12	435	0	0
		10.50	433	0	0
			<u>885</u>	<u>1</u>	0
ELADE CAS DE	001/551/			_	<u>0</u>
FLARE GAS RE					
	PUMP	7	7	0	0
	PUMP	8	7	0	0
	PUMP	9	7	0	0
	PUMP	10	7	0	0
	PUMP	11	7	0	0
	PUMP	12	7	0	0
	RELIEF	9	20	0	0
	RELIEF	12	20	0	0
	VALVE VALVE	7	1	0	0
	VALVE	8	1	0	0
	VALVE	9	1,054	3	0
	VALVE	10	3	0	0
	VALVE	11	3	2	0
	VALVE	12	1,054	0	0
			2 400	7 	
			<u>2,198</u>	<u>5</u>	<u>0</u>

<u>VGO</u>

		10,083	47	0
		<u>1,276</u>	<u>9</u>	<u>0</u>
RACCOR 5. 500	12	3	0	0
VALVE	12	3	1	0
VALVE	11		3	0
VALVE	10	616	0	0
VALVE	9	4	0	0
VALVE	8	4		0
VALVE	7	617	0 4	0
RELIEF	10	11		0
RELIEF	7	11	0	0
PUMP	12	1	0	0
PUMP	11	1	0	
PUMP	10	1	0	0
PUMP	9	1	0	0
PUMP	8	1	0	0
PUMP	7	1	0	0
CONECT	10	1	1	

Page 3 of 3

MONROE ENERGY TRAINER REPORT GGGa SEMI ANNUAL LDAR REPORT COMPONENTS ON DELAY OF REPAIR REPORT DATE: JANUARY 5, 2016

REPORT PERIOD: JULY 1, 2016 THRU DECEMBER 31, 2016

TAG	UNIT	CLASS	DATE DI ACED ON DI
			DATE PLACED ON DI
		TO	OTAL: 0

MONROE ENERGY TRAINER REPORT GGGa SEMI ANNUAL LDAR REPORT REMOVED FROM DELAY OF REPAIR REPORT DATE: JANUARY 5, 2016

REPORT PERIOD: JULY 1, 2016 THRU JANUARY 31, 2016

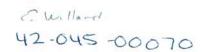
TAG	UNIT	ON DELAY	OFF DELAY
		TOTAL:	0

MONROE ENERGY TRAINER REPORT GGGa SEMI ANNUAL LDAR REPORT ADDED AND DELETED

REPORT DATE: JANUARY 5, 2016

REPORT PERIOD: JULY 1, 2016 THRU DECEMBER 31, 2016

UNIT	CLASS	ADDED	DELETE
543 CRUDE 543 CRUDE 543 CRUDE 544 CRUDE 544 CRUDE 544 CRUDE 544 VACUUM 544 VACUUM 544 VACUUM BOILER 14 BOILERS 9 & 10 BOILERS 9 & 10 FLARE GAS RECOVERY FLARE GAS RECOVERY FLARE GAS RECOVERY FLARE GAS RECOVERY VGO VGO VGO VGO	PRESSURE RELIEF DEVICE PUMP VALVE PRESSURE RELIEF DEVICE PUMP VALVE PRESSURE RELIEF DEVICE PUMP VALVE CONNECTOR PRESSURE RELIEF DEVICE VALVE COMPRESSOR PRESSURE RELIEF DEVICE PUMP VALVE COMPRESSOR PRESSURE RELIEF DEVICE PUMP VALVE COMPRESSOR CONNECTOR PRESSURE RELIEF DEVICE PUMP VALVE COMPRESSOR CONNECTOR PRESSURE RELIEF DEVICE PUMP VALVE	0 0 0 8 0 0 1 0 0 3 0 1 0 0 3 0 0 0 0 0 1 0 0 0 0	0 0 0 4 0 0 1 0 0 1 0 0 0 0 2 0 0 0 0 0 0 0 0 0





Monroe Energy, LLC 4101 Post Road Trainer, PA 19061 (610) 364-8000

January 11, 2017

Via FedEx

Mr. James Rebarchak Program Manager, Air Quality Program PA Department of Environmental Protection Southeast Regional Office 2 East Main Street Norristown, PA 19401 RECEIVED

JAN 31 2017

Air Protection Division

RE:

Monroe Energy, LLC – Trainer Refinery 40 CFR 60, Subpart QQQ Semi-Annual Report Reporting Period: July 1 – December 31, 2016 Title V Operating Permit No. 23-00003

Mr. Rebarchak:

In accordance with 40 CFR Part 60, Subpart QQQ – Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems, the Monroe Energy, LLC Trainer Refinery respectfully submits this Semi-Annual Report for the reporting period July 1, 2016 through December 31, 2016.

All required visual inspections and Method 21 monitoring activities were completed during the reporting period for the following regulated equipment:

- API Separator North and South Bay Floating Roofs
- API Separator North and South Bay Fixed Inlet and Outlet Covers
- Regulated Carbon Canisters.
- Regulated Slop Oil Tanks.

Inspection findings and repairs to the aforementioned compliance points are as follows:

Date	Unit	Tag	Class	Findings	Date/Method of Repair	Confirmation
12/20/2016	AWWTP	QQQ97	API Back End Fixed Roof (North Side)	During QQQ Compliance Semi Annual Visual Inspection of API Separator Bay C/D Panel identified a gap in panel seam caulking	12/20/2016/ Environmental Contractor Caulked Gap in Seam	12/20/2016 (Final inspection and confirmation by QQQ Program Contractor and Program Lead)
12/20/2016	AWWTP	QQQ02	API Front End Fixed Roof (North Side)	During QQQ Compliance Semi Annual Visual Inspection of API Separator identified a gap in panel seam caulking	12/20/2016/ Environmental Contractor Caulked Gap in Seam	12/20/2016 (Final inspection and confirmation by QQQ Program Contractor and Program Lead)
12/20/2016	AWWTP	QQQ28	API Front End Fixed Roof (North Side)	QQQ Compliance Semi Annual Visual Inspection of API Separator identified a gap in flanged butterfly skim valve cover seam caulking	12/20/2016/ Environmental Contractor Caulked Gap in Seam	12/20/2016 Final inspection and confirmation by QQQ Program Contractor and Program Lead

OWS (Process Water Sewer) Drains

All required monthly inspections of regulated drains were completed during the reporting period. The results of the monthly inspections are summarized as:

July:

Tags 1-12, 6-37, 6-38: Added water to dry/low water seal emission control

August:

Tags 2-11, 1-41: Added water to dry/low water seal emission control

September:

Tags 3-070A, 3-070B, 3-24, 1-7, 1-11, 6-37, 6-38, 4-7: Added water to dry/low

water seal emission control

October:

Tags 2-204, 2-205, 2-206, 2-207, 1-41, 4-9, 4-10: Added water to dry/low water

seal emission control

November:

Tags 4-22, 3-18, 4-8: Added water to dry/low water seal emission control

December:

Tags 3-067, 3-37, 6-26, 6-27: Added water to dry/low water seal emission

control

Junction Boxes

All required semi-annual visual inspections of regulated junction boxes and unburied sewer lines were completed and there were no findings identified for the reporting period.

If you have any questions or comments regarding this report, please contact Stephani Ski Szymanski, Environmental Engineer, at (610) 364-8073.

I certify that, based on information and belief formed after reasonable inquiry, the statements and information contained in this form are true, accurate, and complete.

Sincerely

Jeffrey Warmann, CEO and President

CC.

U.S. EPA, Region III

Director, Air Protection Division

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Philadelphia, Pa 19103-2029

Via FedEx